



UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE
United States Patent and Trademark Office
Address: COMMISSIONER FOR PATENTS
P.O. Box 1450
Alexandria, Virginia 22313-1450
www.uspto.gov

m-f

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
-----------------	-------------	----------------------	---------------------	------------------

10/781,308

02/18/2004

Floyd Backes

160-047

4838

34845

7590

09/28/2006

McGUINNESS & MANARAS LLP
125 NAGOG PARK
ACTON, MA 01720

EXAMINER

HOLLIDAY, JAIME MICHELE

ART UNIT

PAPER NUMBER

2617

DATE MAILED: 09/28/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary	Application No. 10/781,308	Applicant(s) BACKES ET AL.	
	Examiner Jaime M. Holliday	Art Unit 2617	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 06 April 2006.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-8 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-8 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08)
Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

Response to Amendment

Response to Arguments

1. Applicant's arguments with respect to **claims 1-8** have been considered but are moot in view of the new ground(s) of rejection.

Claim Rejections - 35 USC § 103

2. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

3. The factual inquiries set forth in *Graham v. John Deere Co.*, 383 U.S. 1, 148 USPQ 459 (1966), that are applied for establishing a background for determining obviousness under 35 U.S.C. 103(a) are summarized as follows:

1. Determining the scope and contents of the prior art.
2. Ascertaining the differences between the prior art and the claims at issue.
3. Resolving the level of ordinary skill in the pertinent art.
4. Considering objective evidence present in the application indicating obviousness or nonobviousness.

4. This application currently names joint inventors. In considering patentability of the claims under 35 U.S.C. 103(a), the examiner presumes that the subject matter of the various claims was commonly owned at the time any inventions covered therein were made absent any evidence to the contrary. Applicant is advised of the obligation under 37 CFR 1.56 to point out the inventor and invention dates of each claim that was

Art Unit: 2617

not commonly owned at the time a later invention was made in order for the examiner to consider the applicability of 35 U.S.C. 103(c) and potential 35 U.S.C. 102(e), (f) or (g) prior art under 35 U.S.C. 103(a).

5. **Claims 1 and 2** are rejected under 35 U.S.C. 103(a) as being unpatentable over **Idnani et al. (Pub # U.S. 2004/0121765 A1)** in view of **Barany et al. (Pub # U.S. 2001/0065081 A1)**.

Consider **claim 1**, Idnani et al. clearly show and disclose a Session Initiation Protocol (SIP) proxy user agent (UA) to serve as a gateway between a SIP core network and a SIP-unaware mobile. The first embodiment of the present invention includes a radio access network (RAN) **110** and remote units, such as mobile station (MS) **101**, reading on the claimed "program product for use by a device capable of wireless communication in a wireless communications environment." Communication system **100** comprises well known entities, such as base sites and SIP components **120** and **125** (each comprising a wireless network interface (**121** and **122**) and a SIP proxy UA (**123** and **124**)), and SIP registrar/presence server **130**, reading on the claimed "platform dependent logic." When the mobile station begins obtaining service from BS **111** it sends a registration request message to the SIP component **120**. This registration request message is not a SIP message, but rather a registration message in accordance with the wireless protocol utilized by the mobile station, reading on the claimed "platform independent protocol messages being exchanged between wireless devices by platform independent logic not

dependent upon the hardware upon which it is employed." Acting as a proxy user agent for the mobile station, SIP proxy UA sends a combined registration and event subscription message for the mobile station to the SIP registrar/presence server. Proxy UAs are responsible for translating the call control messaging between SIP and the appropriate wireless protocol, reading on the claimed "platform dependent logic for use by a wireless device to translate platform independent protocol messages into platform dependent messages, the platform dependent commands being dependent upon the hardware upon which they are employed," (figure 2, paragraphs 8, 10, 11, 14 and 15).

However, Idnani et al. do not specifically disclose that the message sent from the mobile station and translated by the proxy UA affects channel selection.

In the same field of endeavor, Barany et al. clearly show and disclose a method of controlling communications in a wireless network comprises receiving, in a wireless network controller, an indicator in a message sent by a mobile station to establish a data transfer session in the wireless network. One of plural types of protocol stacks to use for communications over an air link between the wireless network controller and mobile station is selected based on the indicator, reading on the claimed "platform dependent messages," (paragraph 8). A communications network **10** includes a wireless core network **11** that enables communications with mobile stations. The wireless core network includes a call state control function (CSCF) module **40** that provides call control for a packet-switched communications session. The CSCF module may be a (Session

Initiation Protocol) SIP proxy or server that receives call requests on behalf of other entities, resolves logical addresses or identifiers in the call requests, and forwards the call requests to intended destinations. Another module in the wireless core network is a media gateway control function (MGCF) module **42** that provides signaling conversion (e.g., SIP-to-SS7 and vice versa via the MGCF **42** and T-SGW **43** interface). A mobile station sends a PACKET CHANNEL REQUEST message to the network on the PRACH (packet random access channel). The network responds to the PACKET CHANNEL REQUEST message with a PACKET IMMEDIATE ASSIGNMENT message on the PAGCH (packet access grant channel). The PACKET IMMEDIATE ASSIGNMENT message contains the PDCHs or packet data channels and either the allocation bit map structure or the uplink state flag (USF) to be used by the mobile station, reading on the claimed "logic operable to independently select a channel based at-least in part on the platform dependent messages," (paragraphs 25, 26, 63, 65).

Therefore, it would have been obvious to a person of ordinary skill in the art at the time the invention was made to request channel assignment using the protocol of the mobile station as taught by Barany et al. in the concept of Idnani et al. in order to effectively transmit messages among devices in a communication system.

Consider **claim 2**, Idnani et al., as modified by Barany et al., disclose the claimed invention **as applied to claim 1 above**, and in addition, Barany et al.

further disclose that the mobile station sends a PACKET CHANNEL REQUEST message over the PRACH to the network. PRACH is a control channel used to request access to the network, reading on the claimed "platform independent messages include claim messages used by devices to select a channel on which to communicate," (paragraph 63).

Therefore, it would have been obvious to a person of ordinary skill in the art at the time the invention was made to request channel assignment using a particular control channel as taught by Barany et al. in the concept of Idnani et al. in order to effectively transmit messages among devices in a communication system.

6. **Claims 3-8** are rejected under 35 U.S.C. 103(a) as being unpatentable over **Idnani et al. (Pub # U.S. 2004/0121765 A1)** in view of **Barany et al. (Pub # U.S. 2001/0065081 A1)**, and in further view of **Kallio (Pub # U.S. 2004/0014422 A1)**.

Consider **claim 3**, and **as applied to claim 1 above**, Idnani et al., as modified by Barany et al., clearly show and disclose the claimed invention except that the messages, reading on the claimed "platform independent messages," sent are include Announce messages.

In the same field of endeavor, Kallio clearly shows and discloses an invention that enables terminal devices to efficiently transition from a first access point to a second access point based on service discovery information that is transmitted by the second access point. A terminal device **402** enters a page

scan state, where it awaits one or more paging messages. Access point **406** enters a paging mode and transmits one or more paging packets. These paging packets each include an identification number based on the address of terminal device, reading on the claimed "platform independent messages include Announce messages used by devices to indicate their presence and their protocol capability to other devices," (figures 8 and 10, paragraphs 13, 133 and 134).

Therefore, it would have been obvious to a person of ordinary skill in the art at the time the invention was made to include information about the sender of messages sent as taught by Kallio in the concept of Idnani et al., as modified by Barany et al., in order to allow devices to effectively communicate in a communication system.

Consider **claim 4**, the combination of Idnani et al. and Eng, as modified by Kallio, disclose the claimed invention **as applied to claim 3 above**, and in addition, Kallio further discloses the terminal device (which is in page scan mode) responds to the paging packets (from the access point) by transmitting a packet that includes its address, reading on the claimed, "platform independent messages include Bid messages, wherein a sending device sends a Bid message to a receiving device to indicate that the sending device desires to communicate in the wireless communications environment via the receiving device," (paragraph 134).

Therefore, it would have been obvious to a person of ordinary skill in the art at the time the invention was made to include information about the sender of messages sent as taught by Kallio in the concept of Ildnani et al., as modified by Barany et al., in order to allow devices to effectively communicate in a communication system.

Consider **claim 5**, the combination of Ildnani et al. and Eng, as modified by Kallio, disclose the claimed invention **as applied to claim 4 above**, and in addition, Kallio further discloses that the access point receives a packet from terminal device, which includes its address information. In response, the access point transmits a frequency hop synchronization (FHS) packet, reading on the claimed "Accept message." The FHS packet is used to pass information that allows terminal device to synchronize with the frequency hopping sequence of access point. Upon receipt of this FHS packet, terminal device transmits a further packet to confirm receipt of the FHS packet. Both terminal device and access point enter into the connection state at this point, reading on the claimed, "platform independent messages include Accept messages, wherein a sending device sends an Accept message to a receiving device in response to a Bid message to indicate that the sending device will allow the receiving device to communicate in the wireless communications environment via the sending device," (paragraph 135).

Therefore, it would have been obvious to a person of ordinary skill in the art at the time the invention was made to transmit messages to confirm

acceptable communication set-up as taught by Kallio in the concept of Idnani et al., as modified by Barany et al., in order to allow devices to effectively communicate in a communication system.

Consider **claim 6**, the combination of Idnani et al. and Eng, as modified by Kallio, disclose the claimed invention **as applied to claim 5 above**, and in addition, Idnani et al. further disclose that when the mobile station begins obtaining service from a base station it sends a registration request message to SIP component that comprises a proxy UA, which is responsible for translating the call control messaging between SIP and the appropriate wireless protocol. The SIP proxy UA then sends a combined registration and event subscription message for the mobile station to SIP registrar/presence server, reading on the claimed "platform independent messages include Registration Request messages, wherein a sending device sends a registration request message to a receiving device to indicate that the sending device desires to communicate in the wireless communications environment via the receiving device using a particular protocol," (paragraphs 14 and 15).

Consider **claim 7**, the combination of Idnani et al. and Eng, as modified by Kallio, disclose the claimed invention **as applied to claim 6 above**, and in addition, Idnani et al. further disclose in response to the registration request message, SIP registrar sends SIP OK message to SIP proxy UA, reading on the claimed, "platform independent messages include Registration Acknowledge messages, wherein a sending device sends a Registration acknowledge

message to a receiving device in response to a Registration Request message,” (paragraph 30). Kallio also further discloses that its system for handovers in implemented in a Bluetooth environment, which defines a short-range radio network, reading on the claimed “sending device understands that the receiving device will communicate in the wireless communications environment using the Dynamic Radio Control Protocol,” (paragraphs 4 and 13).

Consider **claim 8**, the combination of Idnani et al. and Eng, as modified by Kallio, disclose the claimed invention **as applied to claim 1 above**, and in addition, Kallio further discloses that an operational environment for the system for handovers embodies multiple terminal devices communicating with access points across various ad hoc networks, reading on the claimed “the wireless communications environment is an 802.11 wireless network,” (paragraph 35). It is known in the art that an 802.11 wireless network is an ad hoc network.

Therefore, it would have been obvious to a person of ordinary skill in the art at the time the invention was made to have mobile stations communicate across various networks as taught by Kallio in the concept of Idnani et al., as modified by Barany et al., in order to allow devices to effectively communicate in a communication system.

Conclusion

7. Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

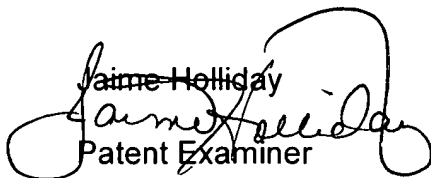
A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.


Any inquiry concerning this communication or earlier communications from the examiner should be directed to Jaime M. Holliday whose telephone number is (571) 272-8618. The examiner can normally be reached on Monday through Friday 7:30am to 4:00pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Joseph Feild can be reached on (571) 272-4090. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Art Unit: 2617

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.


Jaime Holliday
Patent Examiner


JOSEPH FEILD
SUPERVISORY PATENT EXAMINER